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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/437,171	11/09/1999	JOHN M. KRAJNIK	5661	7614

7590 12/22/2003

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EXAMINER

REDDICK, MARIE L

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

024

Office Action Summary	Application No.	Applicant(s)	
	09/437,171	KRAJNIK ET AL.	
	Examiner	Art Unit	
	Judy M. Reddick	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 8-14, 17 and 28-30 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-7, 15, 16 & 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-7, 15, 16 & 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cruden et al(U.S. 4,176,103) in combination with Huth et al(U.S. 5,102,936).

Cruden et al disclose and exemplify aqueous dispersions of carbonyl-group containing polymers (polymer latexes), useful in coating and binder compositions such as paints, adhesives, paper coatings, etc., wherein said polymer is derived from carbonyl-containing monomers such as vinyl acetoacetate, diacetone acrylamide, etc. and other monoethylenically unsaturated monomers which include fatty acid vinyl esters, esters of (meth)acrylic acid such as butyl acrylate, unsaturated carboxylic acids which include (meth)acrylic acid, etc. Cruden et al @ col. 6, lines 1-7, further invite the use of conventional materials such as thickeners, dispersing agents and other commonly known additives in formulating the antecedently recited aqueous polymer dispersions. More specifically, Cruden et al exemplify diacetone acrylamide-governed polymer latexes derived from 44 wt.% of methyl methacrylate, 50 wt.% of butyl acrylate, 2 wt.% of methacrylic acid and 4 wt.% of diacetone acrylamide and clearly overlapping in scope with component (a) per claim 1. See, e.g., the Abstract, cols. 1-6 and the Runs, especially Run 2 of Cruden et al.

Huth et al teach aqueous surface-active, urethane derivatives-govern copolymer-containing aqueous dispersions, useful in enhancing the rheological and thickening properties in aqueous preparations such as non-spatter emulsion paints, wherein said copolymers are derived from ethylenically unsaturated monomers which comprise a) 25 to 85 wt.% of

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ethylenically unsaturated hydrophobic monomers, b) 1 to 50 wt.% of ethylenically unsaturated monomers capable of salt formation, c) 0.1 to 30 wt.% of macromonomer units of surface-active urethane derivatives, d) 0 to 10 wt.% of other ethylenically unsaturated monomers containing functional radicals which include n-methylol(meth)acrylamide, e) 0-5 wt.% of carbonyl-group containing compounds, etc., said copolymer comfortably overlapping in scope with component (b) per claim 1. See, e.g., the Abstract, cols. 2-10 and the Runs of Huth et al.

The disclosure of Cruden et al differs basically from the claimed invention as per the non-express disclosure of an embodiment directed to the precisely defined second polymer (b) per the claimed invention. However, Cruden et al at col. 6, lines 1-6 teaches that the coating compositions derived from these modified polymer latexes can include materials such as thickeners, dispersing agents, etc. To this end, one having ordinary skill in the art would have found it obvious, on its face, to use the copolymer of Huth et al, as the thickener and/or dispersant in the aqueous system of Cruden et al and with a reasonable expectation of obtaining the cumulative additive effect, i.e., a reasonable expectation of success. Criticality for such, clearly commensurate in scope with the claims, not having been demonstrated on this record. Further, the interchangeability of one well known latent crosslinking agent for another is a matter of ordinary choice to the skilled artisan and with a reasonable expectation of success, absent some unusual or unexpected results(see, e.g., claim 7).

As to the latent crosslinking monomer per claim 2 as dependent from claim 1 and governed by a content in excess of 5 wt. %, such would have been prima facie obvious, based on the close proximity between the lower content of the latent crosslinking monomer per the claimed invention and the upper limit content of 5 wt.% described per Huth et al, with the resulting expectation that the copolymers would have the same or substantially the same properties(Titanium Metals Corp. v. Banner, 778 F2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985).

Response to Arguments

3. Applicant's arguments filed 10/01/03 have been fully considered but they are not persuasive.

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there is ample motivation to use the copolymer of Huth et al as the thickener and/or dispersant in the system of Cruden et al as per reasons clearly established on the record (paper no. 18, 04/02/03) and with a reasonable expectation of success. Furthermore, there are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art as provided for under the guise of *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). There is nothing on the record showing that the claimed composition is synergistically better than the compositions of the prior art. The bottom line is that criticality, clearly commensurate in scope with the claims, has not been demonstrated on this record. Since the copolymers of Huth et al overlap in scope with the second polymer(b) per the claimed invention, latent-crosslinking properties would be expected to be possessed by the copolymers of Huth et al. Moreover, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious as provided for under the guise of *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). The recitation of an additional advantage associated with doing what the prior art suggests does not lend patentability to an otherwise unpatentable invention USPQ 560 (CCPA 1972) as provided for under the guise of *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990). Lastly, mere Counsel's arguments unsupported

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by factual evidence, are given little weight as provided for under the guise of *In re Lindner*, 457 F.2d 506, 509, 173 USPQ 356, 359 (CCPA 1972).

Conclusion

5. Claims 3, 8-14, 17 & 28-30 are deemed allowable over the prior art of record.
6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (703)308-4346. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-8183.

Judy M. Reddick
Judy M. Reddick
Primary Examiner
Art Unit 1713

JMR *JMR*
12/18/03